# UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

PATENT NO. : 7,473,236 B1 Page 1 of 3

APPLICATION NO.: 09/664462
DATED: January 6, 2009
INVENTOR(S): Paul R. Mathewson

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

The Title Page, showing an illustrative Figure, should be deleted and substitute therefor the attached Title Page.

Delete Drawing Sheet 1, consisting of Fig. 1 and Fig. 3 and substitute therefor the Drawing Sheet consisting of Fig. 1, as shown on the attached page.

Signed and Sealed this

Seventh Day of September, 2010

David J. Kappos Director of the United States Patent and Trademark Office

### (12) United States Patent

Mathewson

(10) Patent No.:

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#### (54) VARIABLY ADJUSTABLE BI-DIRECTIONAL DEROTATION BRACING SYSTEM

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Subject to any disclaimer, the term of this (\*) Notice:

patent is extended or adjusted under 35

U.S.C. 154(b) by 1826 days.

(21) Appl. No.: 09/664,462

Sep. 18, 2000 (22) Filed:

#### Related U.S. Application Data

- (63) Continuation-in-part of application No. 09/004,010, filed on Jan. 7, 1998, now Pat. No. 6,142,965.
- Provisional application No. 60/039,104, filed on Feb. (60)25, 1997.
- (51) Int. Cl.

A61F 13/00

(2006.01)

(56)

(52) U.S. Cl. ...... 602/62; 602/23; 602/26;

602/60-65, (58) Field of Classification Search ..... 602/20, 23, 26

See application file for complete search history.

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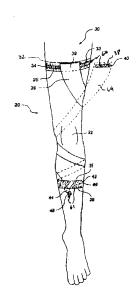
#### (Continued)

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#### ABSTRACT

A lightweight orthopedic brace having no rigid structural elements is constructed from flexible material and is designed primarily to provide for restriction of rotational movement and translation about the target joint by providing flexible bracing members which wind in a circumferentially spiraling manner about a target joint to provide active resistance to axial rotation and translation in the joint. The embodiments of the invention disclosed here provide improved means for placing the invention on the body about a joint, improved means for attachment of bracing members to bracing member supports and improved means for adjusting the length of bracing member to selectively provide for restriction of rotational movement about the target joint.

#### 19 Claims, 6 Drawing Sheets



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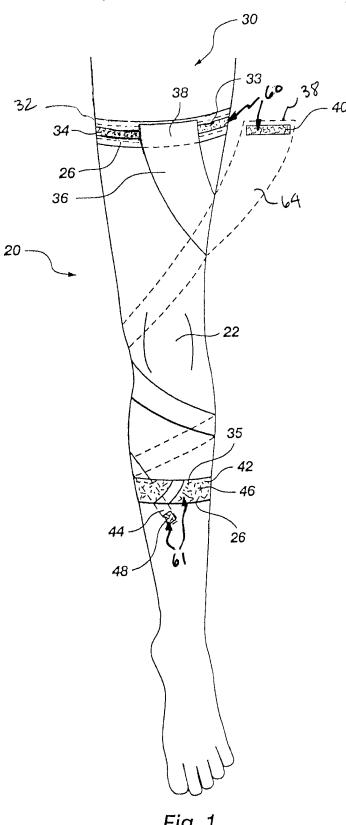


Fig. 1